Application No. 10/533,066 Amendment dated September 24, 2007 Reply to Office Action of June 29, 2007 RECEIVED
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Docket No.: 63286(46342)

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AMENDMENTS TO THE CLAIMS

Listing of Claims

The following listing of Claims replaces all previous listings or versions thereof: 1-21. (canceled).

22. (currently amended) A method of screening a compound or its salt that regulates the glucose uptake activity of a Na⁴/glucose transporter (SGLT) homolog in the small intestine, which comprises using the homolog:

determining (i) the glucose uptake activity of a cell capable of producing the homolog and (ii) the glucose uptake activity of a mixture of a cell capable of producing the homolog and a test compound, and

comparing the glucose uptake activity between the cases of (i) and (ii),
wherein the homolog is a protein which comprises the amino acid sequence represented
by SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5 or SEQ ID NO: 50, or an amino acid sequence
having at least about 90% homology to the amino acid sequence represented by SEQ ID NO: 1,

SEO ID NO: 3, SEO ID NO: 5 or SEO ID NO: 50, its partial peptide, or a salt thereof.

- 23. (canceled)
- 24-48. (canceled)
- 49. (new) The method according to claim 22, wherein the glucose uptake activity for the cases of (i) and (ii) is determined through measurement of accumulated glucose analogs including glucose or 2-deoxy-glucose, which are labeled with ³H, into cells, with the radioactivity, and comparing them as an indicator of the active transport activity of glucose.